

**IN THE CLAIMS:**

Claims 1-27 are pending in this application prior to the amendments.

Claims 1-27 are being canceled without prejudice or disclaimer. New claims 1-28 are being added.

1. (New) A method for producing an antibody to a rapamycin related compound selected from the group consisting of rapamycin, rapamycin metabolites, and rapamycin derivatives, said antibody raised against an immunogen comprising said rapamycin related compound conjugated to a protein carrier by a divinyl sulfone linker arm molecule, said method comprising:
  - a.) administering said immunogen to an animal so as to affect a specific antibody response to said rapamycin related compound;
  - b.) recovering an antibody to said rapamycin related compound from said animal; and
  - c.) determining that said antibody specifically recognizes a region of said rapamycin related compound, said region selected from the group consisting of the region from C1 to C8 and the region from C23 to C36.
2. (New) The method of claim 1 wherein said protein carrier is selected from the group consisting of human serum albumin and keyhole limpet hemocyanin.
3. (New) The method of claim 1 wherein said rapamycin related compound is conjugated at the C27 or at the C31 position to said protein carrier.
4. (New) The method of claim 1 wherein said rapamycin metabolite is selected from the group consisting of M1, M3, M4, and M5.
5. (New) The method of claim 1 wherein said rapamycin derivative is a 42-O-(2-hydroxy-ethyl) derivative of rapamycin.

6. (New) The method of claim 5 wherein said 42-O-(2-hydroxy-ethyl) derivative is RAD.
7. (New) The method of claim 1 wherein said rapamycin related compound is rapamycin.
8. (New) The method of claim 1 wherein said immunogen is selected from the group consisting of Rapa-27-ox-DVS-KLH, Rapa-27-ox-DVS-HSA, Rapa-31-DVS-KLH, and Rapa-31-DVS-HSA .
9. (New) The method of claim 1 wherein the step of recovering said antibody includes isolating at least one antibody-producing cell from said animal; immortalizing said antibody-producing cell to produce a hybridoma; and isolating said antibody from said hybridoma.
10. (New) The method of claim 9 wherein said protein carrier is selected from the group consisting of human serum albumin and keyhole limpet hemocyanin.
11. (New) The method of claim 9 wherein said rapamycin related compound is conjugated at the C27 or the C31 position to said protein carrier.
12. (New) The method of claim 9 wherein said rapamycin metabolite is selected from the group consisting of M1, M3, M4, and M5.
13. (New) The method of claim 9 wherein said rapamycin derivative is a 42-O-(2-hydroxy-ethyl) derivative of rapamycin.
14. (New) The method of claim 13 wherein said 42-O-(2-hydroxy-ethyl) derivative is RAD.
15. (New) The method of claim 9 wherein said rapamycin related compound is rapamycin.

16. (New) The method of claim 11 wherein said immunogen is selected from the group consisting of Rapa-27-ox-DVS-KLH, Rapa-27-ox-DVS-HSA, Rapa-31-DVS-KLH, and Rapa-31-DVS-HSA .
17. (New) A method for producing at least one antibody to a rapamycin related compound selected from the group consisting of rapamycin and rapamycin metabolites, said at least one antibody raised against an immunogen comprising said rapamycin related compound conjugated to a protein carrier by a divinyl sulfone linker arm molecule, said method comprising:
  - a.) administering said immunogen to an animal so as to affect a specific antibody response to said rapamycin related compound;
  - b.) recovering an antibody to said rapamycin related compound from said animal;
  - c.) determining that said antibody specifically recognizes a region of said rapamycin related compound, said region selected from the group consisting of the region from C9 to C23, the region from C24 to C36, demethylated C7, demethylated C32, and demethylated C41.
18. (New) The method of claim 17 wherein said protein carrier is selected from the group consisting of human serum albumin and keyhole limpet hemocyanin.
19. (New) The method of claim 17 wherein said rapamycin related compound is conjugated at the C41 or at the C42 position to said protein carrier.
20. (New) The method of claim 17 wherein said rapamycin metabolite is selected from the group consisting of M1, M2, M3, M4, and M5.
21. (New) The method of claim 17 wherein said rapamycin related compound is rapamycin.

22. (New) The method of claim 17 wherein said immunogen is selected from the group consisting of Rapa-42-DVS-KLH and Rapa-42-DVS-HSA.
23. (New) The method of claim 17 wherein the step of recovering said antibody includes isolating at least one antibody-producing cell from said animal and immortalizing said antibody-producing cell to produce a hybridoma; and isolating said antibody from said hybridoma.
24. (New) The method of claim 23 wherein said immunogen is selected from the group consisting of Rapa-42-DVS-KLH and Rapa-42-DVS-HSA.
25. (New) The method of claim 23 wherein said protein carrier is selected from the group consisting of human serum albumin and keyhole limpet hemocyanin.
26. (New) The method of claim 23 wherein said rapamycin related compound is conjugated at the C41 or at the C42 position to said protein carrier.
27. (New) The method of claim 23 wherein said rapamycin metabolite is selected from the group consisting of M1, M2, M3, M4, and M5.
28. (New) The method of claim 23 wherein said rapamycin related compound is rapamycin.

**REMARKS**

It is respectfully requested that this application be reconsidered in view of the above amendments and the following remarks and that all of the claims be allowed.

Applicants have canceled claims 1-27 and added new claims 1-28, all without prejudice to their future prosecution. The cancellation of claims 1-27 makes no admission regarding the patentability of this subject matter and should not be so construed.